

CLAIMS

1. A wax comprising a reaction product of:
 - (a) 30% to 45% of a C₆-C₁₂ linear dicarboxylic acid;
 - (b) 40% to 60% of a C₁₀-C₂₂ monocarboxylic acid; and
 - (c) 12% to 20% of a diamine of formula H₂N(CH₂)_nNH₂, wherein n is an integer from 2 to 6.
2. The wax of claim 1 in which said C₆-C₁₂ linear dicarboxylic acid is a C₈-C₁₀ linear dicarboxylic acid, said C₁₀-C₂₂ monocarboxylic acid is a C₁₆-C₁₈ monocarboxylic acid, and n is 2 or 3.
3. The wax of claim 2 which is a reaction product of 32% to 40% of a C₈-C₁₀ linear dicarboxylic acid, 43% to 53% of a C₁₆-C₁₈ monocarboxylic acid, and 14% to 18% of said diamine.
4. The wax of claim 3 in which said C₈-C₁₀ linear dicarboxylic acid is a C₁₀ linear dicarboxylic acid, said C₁₆-C₁₈ monocarboxylic acid is a C₁₈ monocarboxylic acid, and said diamine is ethylene diamine.
5. The wax of claim 4 which is a reaction product of 34% to 38% of a C₁₀ linear dicarboxylic acid, 46% to 50% of a C₁₈ monocarboxylic acid, and 15% to 17% of ethylene diamine.
6. The wax of claim 5 which is a reaction product of sebacic acid, stearic acid and ethylene diamine.
7. The wax of claim 1 in which a ratio of total number of equivalents of carboxylic acid reactants to total number of equivalents of amine reactants is from 0.97 to 1.06.

8. The wax of claim 7 in which said C₆-C₁₂ linear dicarboxylic acid contains a saturated alkylene group, said C₁₀-C₂₂ monocarboxylic acid contains a saturated alkyl group, and said diamine contains a saturated alkylene group; n is 2 or 3; and the ratio of total number of equivalents of carboxylic acid reactants to total number of equivalents of amine reactants is from 1.0 to 1.03.

9. The wax of claim 8 which is produced by first combining said C₆-C₁₂ linear dicarboxylic acid and said diamine, with sub-surface addition of the diamine, and then adding said C₁₀-C₂₂ monocarboxylic acid.

10. The wax of claim 8 in which said C₆-C₁₂ linear dicarboxylic acid is sebacic acid, said C₁₀-C₂₂ monocarboxylic acid is stearic acid and n is 2.